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Title	: Pre-processing of MiG-29 aircraft for CFD analysis		
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Abstract :

The Structural Integrity Division of NAL has initiated a project on the total technical life extension (TTLE) of the MiG-29 aircraft, sponsored by the Indian Air Force. The aerodynamic loads acting on the aircraft at different flight conditions need to be known in order to simulate these loads in the laboratory and predict the fatigue life of the aircraft structure. These loads can be estimated by the use of Computational Fluid Dynamics (CFD) techniques, which now have the capability to simulate the flow past realistic aerospace vehicles. A vertex based Euler code, JUEL3D, will be used to compute inviscid flow past the MiG-29 configuration. This code can handle any arbitrary single/multi-body geometry and requires the generation of a structured multi-block grid around the body. The surface coordinates of the body must be known to a reasonable accuracy in order to generate an accurate body-conforming grid. This report describes the generation of the surface coordinates and the multi-block grid for the MiG-29 aircraft.